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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/21/2004

Masaki Aoki

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EXAMINER

WILLIAMS, JOSEPH L

ART UNIT

PAPER NUMBER

2889

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,697	Applicant(s) AOKI ET AL.	
	Examiner Joseph L. Williams	Art Unit 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment and response filed on 12/19/2007 has been entered and overcomes the rejection to the claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 6, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato, Akira et al. (JP 2004-047193), of record by Applicant.

Regarding claim 1, Kato ('193) teaches in figure 1 and throughout the text a plasma display panel comprising: a front panel comprising: a first substrate (9); a first electrode (7) on the first substrate; a dielectric glass layer (6) covering the first electrode; and a protective film (5) on the dielectric glass layer, the protective film comprising magnesium oxide (MgO) and an additional oxide, said additional oxide comprising an element with an electro negativity of 1.4 or higher (property of boron oxide) and having a negative charge including at least silicon oxide; and a back panel on a second substrate (4) comprising: at least a second electrode (3); a barrier rib (2); and a phosphor layer (1 R, 1G, 1B), wherein the protective film and the phosphor layer

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are arranged facing each other, and form a discharge space partitioned with a barrier rib between the front panel and the back panel..

Regarding claim 4, Kato ('193) teaches a method for producing a plasma display panel including: forming a first electrode on a first substrate; forming a dielectric glass layer to cover the first electrode; forming a protective film to cover the dielectric glass layer, the protective film comprising magnesium oxide (MgO) and an additional oxide, .° said additional oxide comprising an element with an electro negativity of 1.4 or higher and having a negative charge including boron oxide; wherein the process of forming the protective film is vacuum evaporation.

Regarding claim 6, Kato ('193) teaches the second electrode is positioned orthogonally to the first electrode.

Regarding claim 7, Kato ('193) teaches a second electrode on a second substrate, wherein the first electrode and the second electrode are arranged orthogonally to each other.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. (JP 2002-360535), of record by Applicant.

Regarding claim 1, Kato ('535) teaches in figure 1 and throughout the text a plasma display panel comprising: a front panel comprising: a first substrate (9); a first electrode (7) on the first substrate; a dielectric glass layer (6) covering the first electrode; and a protective film (5) on the dielectric glass layer, the protective film comprising magnesium oxide (MgO) and an additional oxide, said additional oxide comprising an element with an electro negativity of 1.4 or higher (property of silicon oxide) and having a negative charge including at least silicon oxide; and a back panel on a second substrate (no number) comprising: at least a second electrode (3); a barrier rib (2); and a phosphor layer (1 R, 1G, 1B), wherein the protective film and the phosphor layer are arranged facing each other, and form a discharge space partitioned with a barrier rib between the front panel and the back panel..

Kato does not disclose the use of germanium oxide, boron oxide, or lead oxide (as opposed to silicon dioxide).

However, the Applicant has not disclosed any criticality to the selection of germanium oxide, boron oxide, or lead oxide, except to amend around the prior art of record. The Applicant has not disclosed any unexpected results from the use of only germanium oxide, boron oxide, or lead oxide. Therefore, it is the position of the Examiner that the selection of germanium oxide, boron oxide, or lead oxide is an obvious choice in design.

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an additional oxide (with MgO) in the protective layer, that additional oxide comprising an element with an electro negativity of 1.4 or higher

and having a negative charge. The selection of either germanium oxide, boron oxide, or lead oxide is an obvious choice in design.

Regarding claim 4, Kato ('535) teaches a method for producing a plasma display panel including: forming a first electrode on a first substrate; forming a dielectric glass layer to cover the first electrode; forming a protective film to cover the dielectric glass layer, the protective film comprising magnesium oxide (MgO) and an additional oxide, .° said additional oxide comprising an element with an electro negativity of 1.4 or higher and having a negative charge including silicon oxide; wherein the process of forming the protective film is vacuum evaporation (paragraph 13).

Kato does not disclose the use of germanium oxide, boron oxide, or lead oxide (as opposed to silicon dioxide).

However, the Applicant has not disclosed any criticality to the selection of germanium oxide, boron oxide, or lead oxide, except to amend around the prior art of record. The Applicant has not disclosed any unexpected results from the use of only germanium oxide, boron oxide, or lead oxide. Therefore, it is the position of the Examiner that the selection of germanium oxide, boron oxide, or lead oxide is an obvious choice in design.

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an additional oxide (with MgO) in the protective layer, that additional oxide comprising an element with an electro negativity of 1.4 or higher

and having a negative charge. The selection of either germanium oxide, boron oxide, or lead oxide is an obvious choice in design.

Regarding claim 6, Kato ('535) teaches the second electrode is positioned orthogonally to the first electrode.

Regarding claim 7, Kato ('535) teaches a second electrode on a second substrate, wherein the first electrode and the second electrode are arranged orthogonally to each other.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 4, 6, and 7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571) 272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Williams/
Primary Examiner, Art Unit 2889